Comments on Aquatic Plant Extracts -- Current Listing 205.601(j)

I am writing to request that the listing of aquatic plant extracts be modified to reflect current best production methods or that it be removed from the national list of allowed synthetics.

- 1. Continuous improvement is one of the underlying principles of organic production. Encouraging better methods as they become available was intentionally built into the organic regulations for just this type of situation. As gentler production methods that align more closely with organic principles are developed, it is essential that we encourage and adopt them.
- 2. When the initial organic regulations were developed at the end of the last century, the primary commercial method of making liquid seaweed products was still based on the old Maxicrop patent, using alkaline hydrolysis (potassium hydroxide or sodium hydroxide) to break the cell wall of seaweeds.
- 3. Non-synthetic production methods for making these extracts are now fully commercialized and are available to produce aquatic plant extracts without the use of synthetic chemicals. There are several natural, less caustic, methods of producing seaweed extracts. These include cell burst technologies using pressure and heat and enzyme digestion which are proven extraction practices and are available commercially from multiple sources.
- 4. The current listing of aquatic plant extracts are not clear and allow the introduction of chemical potash fertilizers into the production of certified organic crops. Potassium hydroxide-based extracts currently being used on organic farms often contain synthetic chemical potassium in higher doses than appear to be required for extraction. Further, these extracts, when blended with other allowed phosphoric acid stabilized inputs, form highly soluble chemical fertilizers, such as potassium phosphate.

There appear to be two choices for improving the organic regulations:

- A. Remove aquatic plant extracts from the list. Continuation of the listing of aquatic plant extracts may be needed for a limited time to allow time for the adoption of natural extraction methods by input manufacturers and organic producers.
- B. Clarify the current annotations. Specify the maximum quantity of potassium hydroxide that can be used. During such a review, a petition to add new extractants, such as potassium carbonate, could be considered.

Thank you for considering my comments.

Ellen Coleman Thorvin, Inc. PO Box 458 New Castle, VA 24127 540-964-5108 ellenc@thorvin.com